

AMENDMENTS TO THE CLAIMS

Claims 1-11 cancelled.

12. (New) A process for the production of flexographic printing plates by means of laser engraving, in which the starting material used is a photopolymerizable flexographic printing element at least comprising, arranged one on top of the other,

- a dimensionally stable substrate,
- a photopolymerizable, relief-forming layer having a thickness of at least 0.3 mm, at least comprising an elastomeric binder, an ethylenically unsaturated monomer and a photoinitiator, and
- a protective element substantially transparent to actinic light,

wherein the process comprises - in this sequence - the following steps:

- (a) crosslinking of the relief-forming layer in the total volume of the layer by exposure to actinic light through the protective element,
- (b) removal of the protective element and
- (c) engraving of a print relief into the crosslinked relief-forming layer with the aid of a laser emitting from 3 000 to 12 000 nm, the height of the relief elements to be engraved with the laser being at least 0.03 mm,

and the protective element is a film which has been provided with a nontacky treatment or coating on the side facing the relief-forming layer and which is applied directly to the relief-forming layer, the adhesion between the protective element and the relief-forming layer being adjusted so that the protective element can be peeled off the crosslinked, relief-forming layer after process step (a), and wherein the actinic light is UV-A radiation having a wavelength of from about 320 to 400 nm and/or UV-A/VIS radiation having a wavelength of from about 320 to about 700 nm.

13. (New) A process as claimed in claim 12, wherein the protective element comprises a nontacky coating.
14. (New) A process as claimed in claim 13, wherein the nontacky layer substantially comprises a polyamide, and the elastomeric binder in the relief-forming layer is a thermoplastic elastomeric block copolymer of the styrene/butadiene type.
15. (New) A process as claimed in claim 12, which additionally comprises a subsequent cleaning step (d).
16. (New) A process as claimed in claim 12, wherein decomposition products formed in step (c) are sucked away.
17. (New) A process as claimed in claim 12, wherein, after the removal of the protective film (b), the crosslinked relief-forming layer is crosslinked in a subsequent process step (b') to a limited depth of penetration, viewed from the surface, beyond the extent of the crosslinking density produced by step (a).
18. (New) A process as claimed in claim 17, wherein the depth of penetration to which additional crosslinking is effected in step (b') is from 5 to 200 μm .
19. (New) A process as claimed in claim 17, wherein the surface crosslinking step (b') is carried out using UV light having a wavelength of from 200 to 300 nm.
20. (New) A photopolymerizable flexographic printing element, at least comprising, arranged one on top of the other,
- a dimensionally stable substrate,
 - a photopolymerizable, relief-forming layer having a thickness of at least 0.3 mm, at least comprising an elastomeric binder, an ethylenically unsaturated monomer and a photoinitiator, and
 - a protective element substantially transparent to actinic light,

wherein the protective element is a film which has been provided with a nontacky treatment or coating on the side facing the relief-forming layer and which is applied directly to the relief-forming layer, the adhesion between the protective element and the relief-forming layer being adjusted so that the protective element can be peeled off the crosslinked relief-forming layer after exposure to actinic light through the protective element, and wherein the actinic light is UV-A radiation having a wavelength of from about 320 to 400 nm and/or UV-A/VIS radiation having a wavelength of from about 320 to about 700 nm.

21. (New) A flexographic printing element as claimed in claim 20, wherein the protective element comprises a nontacky coating.

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1.126 ²² 21. (New) A flexographic printing element as claimed in claim 21, wherein the nontacky layer substantially comprises polyamide.